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2003

FLUCTUATION OF ARTHROPODS AT DIFFERENT  
GROWTH STAGES OF CORN (*Zea mays*, L.) INTERCROPPED  
WITH CUCUMBER (*Cucumis sativus*)

T H E S I S

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April 2003

**POPULATION FLUCTUATION OF ARTHROPODS AT DIFFERENT GROWTH  
STAGES OF CORN (*Zea mays*, L.) INTERCROPPED  
WITH CUCUMBER (*Cucumis sativus*)**

Undergraduate Thesis  
Presented to the Faculty of the  
Cavite State University  
Indang, Cavite

In partial fulfillment  
of the requirements for the degree of  
Bachelor of Science in Agriculture  
(Major in Crop Protection)



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*Population fluctuation of arthropods at  
different growth stage of corn (Zea mays  
631.58 M67 2003  
T-2503*

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April 2003

## ABSTRACT

**MIRANDA, KARENINA P. Population Fluctuation of Arthropods at Different Growth Stages of Corn (*Zea mays*, L.) Intercropped with Cucumber (*Cucumis sativus*).** Undergraduate Thesis, Bachelor of Science in Agriculture Crop Protection- Entomology, Cavite State University, Indang, Cavite. April 2003. Adviser: Dr. Arnulfo C. Pascual.

The study was conducted at Banay-banay, Amadeo, Cavite from October 2002 to January 2003 to determine and compare the population fluctuation of arthropods at different growth stages of monocultured corn and corn intercropped with cucumber.

The insect pests that occurred in corn were corn seedling maggot (*Atherigona oryzae* Malloch), corn planthopper (*Peregrinus maidis*), corn semilooper (*Chrysodeixis chalcites* [Esper] L.), cucumber beetle (*Aulacophora similes*), flea beetle (*Phyllotreta* spp.), striped flea beetle (*Phyllotreta nemorum*), corn aphids (*Rhopalosiphum maidis* Fitch) and brown grasshopper (Family Acrididae), and longhorned grasshopper (*Rhaneroptera furcifera*). On the other hand, the whitefly (*Bemisia tabaci*), leafminer (Family Agromyzidae), cutworm (*Spodoptera litura*), black leafhopper (*Ricania speculum*) and melon aphids (*Aphis gossypii*) were found attacking cucumbers. Corn planthopper was the dominant insect pest of corn. It was observed from early whorl to maturity. Cutworm and whitefly were the dominant insect pests in cucumber.

The number of beneficial arthropods was also determined. These are the spiders (Arachnida), ladybird beetles (Coccinellidae), praying mantis (Mantodea) and earwig (Dermaptera). The spiders and ladybird beetles were the dominant groups for both corn and cucumber at certain growth stages.

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# POPULATION FLUCTUATION OF ARTHROPODS AT DIFFERENT GROWTH STAGES OF CORN (*Zea mays*, L.) INTERCROPPED WITH CUCUMBER (*Cucumis sativus*)<sup>1/</sup>

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<sup>1/</sup>A thesis manuscript presented to the Faculty of the Department of Crop Science, College of Agriculture, Forestry, Environment and Natural Resources, Cavite State University, Indang, Cavite, in partial fulfillment of the requirements for the degree of Bachelor of Science in Agriculture (BSA), major in Crop Protection with Contribution No. BSA - 2003-02-122. Prepared under the supervision of Dr. Arnulfo C. Pascual.

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## INTRODUCTION

Multiple cropping is the practice of planting several different crops on the same plot of land at the same time. The integration of many farm enterprises gives farm families several advantages. More crops can be planted in a small place. For instance, intercropping and relay cropping can allow the farmer to plant two crops such as corn and beans in the field at the same time.

The appropriate crops, crop combinations, planting times and planting patterns will vary from place to place, depending on the local climate, soil, topography, water availability, pests and diseases, socio-economic conditions, and other factors.

Corn (*Zea mays*, L.) is one of the major cereal crops in the world. It is used as human food, animal feed and as raw material in the industry. As reported in the Philippines